

## ABSTRACT

A method, apparatus and system extend a mobile home agent functionality to enable mobile nodes to use private address to correspond with nodes having public addresses. Specifically, according to an embodiment of the present invention, a home agent may be configured to assign a private address to a mobile node according to predetermined policies. In one embodiment, the packets from the mobile node may be destined for other mobile nodes that belong to the same administrative domain as the home agent. If so, the home agent may decapsulate and forward the packet directly to the destination mobile node. In an alternate embodiment, the packets from the mobile node may be destined for mobile nodes belonging to a different administrative domain than the home agent. If so, the home agent may decapsulate and perform address and port translation on the packet prior to transmission.